

CLAIMS

What is claimed is:

- 5 1. A method of treating Parkinson's disease in a mammal, comprising administering a therapeutically effective amount of antisense oligonucleotide to the substantia nigra pars reticulata for the downregulation of glutamic acid decarboxylase.
- 10 2. The method of claim 1 wherein the isoform of said glutamic acid decarboxylase is GAD₆₅.
3. The method of claim 1 wherein the isoform of said glutamic acid decarboxylase is GAD₆₇.
- 15 4. The method of claim 1 where in the isoform of said glutamic acid decarboxylase is a combination of GAD₆₅ and GAD₆₇.
5. A method of treating Parkinson's disease in a mammal, comprising
20 administering a therapeutically effective amount of triplex oligonucleotide to the substantia nigra pars reticulata for the downregulation of glutamic acid decarboxylase.
6. The method of claim 5 wherein the isoform of said glutamic acid
25 decarboxylase is GAD₆₅.
7. The method of claim 5 wherein the isoform of said glutamic acid decarboxylase is GAD₆₇.
- 30 8. The method of claim 5 wherein the isoform of said glutamic acid decarboxylase is GAD₆₅ and GAD₆₇.

9. A method of treating Parkinson's disease in a mammal, comprising administering a therapeutically effective amount of antisense oligonucleotide to the internal globus pallidus for the downregulation of glutamic acid decarboxylase.

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10. The method of claim 9 wherein said isoform of said glutamic acid decarboxylase is GAD₆₅.

11. The method of claim 9 wherein the isoform of said glutamic acid decarboxylase is GAD₆₇.

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12. The method of claim 9 wherein the isoform of said glutamic acid decarboxylase is GAD₆₅ and GAD₆₇.

13. A method of treating Parkinson's disease in a mammal, comprising administering a therapeutically effective amount of triplex oligonucleotide to the internal globus pallidus for the downregulation of glutamic acid decarboxylase.

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14. The method of claim 13 wherein the isoform of said glutamic acid decarboxylase is GAD₆₅.

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15. The method of claim 13 wherein the isoform of said glutamic acid decarboxylase is GAD₆₇.

16. The method of claim 13 wherein the isoform of said glutamic acid decarboxylase is GAD₆₅ and GAD₆₇.

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17. A method of treating Parkinson's disease in a mammal, comprising administering a therapeutically effective amount of antisense oligonucleotide to the substantia nigra pars reticulata for the downregulation of glutamate receptors.

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18. A method of treating Parkinson's disease in a mammal, comprising administering a therapeutically effective amount of triplex oligonucleotide to the substantia nigra pars reticulata for the downregulation of glutamate receptors.

5 19. A method of treating Parkinson's disease in a mammal, comprising administering a therapeutically effective amount of antisense oligonucleotide to the internal globus pallidus for the downregulation of glutamate receptors.

10 20. A method of treating Parkinson's disease in a mammal, comprising administering a therapeutically effective amount of triplex oligonucleotide to the internal globus pallidus for the downregulation of glutamate receptors.

15 21. A method of treating Parkinson's disease in a mammal, comprising administering a therapeutically effective amount of antisense oligonucleotide to the thalamic motor nuclei for the downregulation of GABA receptors.

22. A method of treating Parkinson's disease in a mammal, comprising administering a therapeutically effective amount of triplex oligonucleotide to the thalamic motor nuclei for the downregulation of GABA receptors.